

SEMICONDUCTOR STRUCTURES HAVING MULTIPLE CONDUCTIVE LAYERS
IN AN OPENING, AND METHODS FOR FABRICATING SAME

Patrick B. Halahan

Oleg Siniaguine

5 ABSTRACT OF THE DISCLOSURE

In some embodiments, a circuit structure comprises a semiconductor substrate, an opening passing through the substrate between a first side of the substrate and a second side of the substrate, and a plurality of conductive layers in the opening. In some embodiments, one conductive layer provides an electromagnetic shield that shields the 10 substrate from AC signals carried by a contact pad made from another conductive layer on a backside of the substrate. The conductive layers can also be used to form capacitor/rectifier networks. Manufacturing methods also provided.

TELETYPE MARK